

THE CLAIMS

1. (currently amended) A method for treating a the disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response comprising: contacting the mammalian nasal and sinus cells with an inflammatory mediator; wherein the inflammatory mediator is present in an amount capable of reducing the undesired inflammatory response, and is an antioxidant, and is selected from the group consisting of pyruvate and a pyruvate precursor.
2. (original) The method according to claim 1, wherein the inflammatory mediator is formulated into nasal drops.
3. (original) The method according to claim 2, wherein the inflammatory mediator is formulated in a concentration of about 0.1mM to 10.0 mM.
4. (original) The method according to claim 1, wherein the inflammatory mediator is formulated into a nasal ointment.
5. (original) The method according to claim 4, wherein the inflammatory mediator is formulated in a concentration of 0.1mM to 10.0 mM.
6. (original) The method of claim 1, wherein the inflammatory response being reduced is at least one of the following: oxygen radical production, hydrogen peroxide production, cytokine and protease production, prostaglandin production, erythema, histamine and interleukin production.
7. (canceled)
8. (currently amended) The method of claim 1 7, wherein the inflammatory mediator is pyruvate.

9. (currently amended) The method of claim 8 7, wherein the pyruvate is selected from the group consisting of pyruvic acid, lithium pyruvate, sodium pyruvate, potassium pyruvate, magnesium pyruvate, calcium pyruvate, zinc pyruvate, manganese pyruvate, and mixtures thereof.

10. (currently amended) The method of claim 1 7, wherein the inflammatory mediator is a pyruvate precursor.

11. (currently amended) The method of claim 10, wherein the pyruvate precursor is selected from the group consisting of pyruvyl-glycene, pyruvyl-alanine, pyruvyl-leucine, pyruvyl cysteine, pyruvyl-valine, pyruvyl-isoleucine, pyruvyl-phenylalanine, pyruvamide, dihydroxyacetone, propylene--glycol and salts of pyruvic acid.

12. (original) The method of claim 1, wherein the disease state is selected from the group consisting of rhinitis, eosiphilia syndrome, and sinusitis.

13. (original) The method of claim 1, further comprising contacting the mammalian nasal and sinus cells with a therapeutic agent.

14. (original) The method of claim 13, wherein the therapeutic agent is administered prior to the inflammatory mediator.

15. (original) The method of claim 13, wherein the therapeutic agent is administered concomitantly with administration of the inflammatory mediator.

16. (original) The method of claim 13, wherein the therapeutic agent is administered after administration of the inflammatory mediator.

17. (original) The method of claim 13, wherein the therapeutic agent is one or more agents selected from the group consisting of antibacterials, antivirals,

antifungals, antihistamines, proteins, enzymes, hormones, nonsteroidal anti-inflammatories, cytokines, insulin, vitamins and steroids.

18. (original) The method of claim 13, wherein the therapeutic agent is oxymetazoline.

19. (withdrawn) A nasal solution, comprising:

- a) water,
- b) sodium chloride, 0.65 % by weight,
- c) pyruvate, at least 0.1mM,
- d) buffer, and optionally
- e) a preservative.

wherein the nasal moisturizing saline solution is buffered and made isotonic.

20. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration between from about 0.1mM to about 10mM.

21. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration between from about 0.5mM to about 10mM.

22. (withdrawn) The nasal solution of claim 19, wherein the buffer is selected from the group consisting of sodium bicarbonate, disodium phosphate/sodium phosphate, and monobasic potassium phosphate/sodium hydroxide.

23. (withdrawn) The nasal solution of claim 19, wherein the preservative is selected from the group consisting of phenylcarbinol, benzalkonium chloride, and thimerosal.

24. (withdrawn) The nasal solution of claim 19, wherein the pyruvate is present in the solution at a concentration of about 5mM, the buffer is sodium bicarbonate.

25. (withdrawn) The nasal solution of claim 19, further comprising a therapeutic agent wherein the therapeutic agent is one or more agents selected from the group consisting of antibacterials, antivirals, antifungals, antihistamines, proteins, enzymes, hormones, nonsteroidal anti-inflammatories, cytokines, insulin, vitamins and steroids.

26. (withdrawn) The method of claim 13, wherein the therapeutic agent is oxymetazoline.

27. (currently amended) A method for the prevention-and/or treatment of rhinitis, eosinophilia syndrome, and sinusitis-and-related conditions-associated-with nasal-congestion, comprising administering a nasal solution to the nostrils of a patient in need thereof, wherein the nasal moisturizing saline solution comprises:

- a) water,
- b) sodium chloride, 0.65% by weight,
- c) pyruvate, at least 0.1mM,
- d) buffer, and optionally
- e) a preservative.

wherein the nasal moisturizing saline solution is buffered and made isotonic.

28. (original) The method of claim 27, wherein the pyruvate is present in the solution at a concentration between from about 0.1mM to about 10mM.

29. (original) The method of claim 27, wherein the buffer is selected from the group consisting of sodium bicarbonate, disodium phosphate/sodium phosphate, and monobasic potassium phosphate/sodium hydroxide.

29. (original) The method of claim 27, wherein the preservative is selected from the group consisting of phenylcarbinol, benzalkonium chloride, and thimerosal.

30. (original) The method of claim 27, wherein the pyruvate is present in the solution at a concentration of about 5mM, the buffer is sodium bicarbonate, and the preservative is phenylcarbinol.

31. (previously presented) The method of claim 13, wherein the therapeutic agent is an antibacterial.

RESPONSE

Claims 1-31 are pending, claims 19-26 are withdrawn subject to a restriction requirement, and claims 1-18 and 27-31 are objected to. Applicants have amended claims 1, 8, 9, 10, 11, and 27. Applicants have deleted claim 7 and have not added any claims. Accordingly, claims 1-6, 8-18, and 27-31 are presently being examined.

In view of the following Amendment and Response, applicants respectfully request that the Examiner reconsider and withdraw the rejections made in the outstanding Office Action.

Support for the Amendments

Applicants have amended claim 1, 9, 10, 11, and 27, and the claims dependent thereon, in order to more clearly describe and distinctly claim the subject matter of applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response. Specifically, applicants have canceled dependent claim 7 and incorporated the subject matter into independent claim 1 to recite that the inflammatory mediator "is selected from the group consisting of pyruvate and a pyruvate precursor". Applicants have amended claims 8-10 to correct the dependency thereof. Applicants have amended claim 11 to delete "propylene glycol". Applicants have also amended claim 27 to delete the terms "prevention and/or" and "and related conditions associated with nasal congestion". Applicants have entered these amendments in order to overcome the Examiner's rejections.

These amendments to the claims are fully supported in the specification as originally filed, and thus no new matter is introduced by these amendments in accord with 35 U.S.C. Section 132. Accordingly, applicants request entry of these amendments.

Restriction Requirement of the Claims

The Examiner has acknowledged applicant's election with traverse of Group I. The Examiner states that the traversal is on the ground(s) that searching all presented inventions would not represent an undue burden to Examiner but that this is not found persuasive because the presented inventions encompass a large therapeutic compound group not linked by structure, medicament class or biochemical effect and to search this broad functionally would place an undue burden on the Examiner. The Examiner has made the requirement final. The Examiner has withdrawn claims 19-26 from consideration.

Rejection of Claims 27-30 under 35 U.S.C. Section 112, second paragraph.

The Examiner has rejected claims 27-30 under 35 U.S.C. Section 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. The Examiner states that claims 27-30 recite the broad recitation sinusitis and also recite "and related conditions associated with nasal congestion," which is a narrower statement of the range/limitation. The Examiner argues that applicants recitation of the broad range or limitation together with a narrow range or limitation renders independent claim 27, and dependant claims 29-30, as indefinite. Applicants' claims as amended obviate the Examiner's rejections.

As set out above, applicants have amended claim 27, and the claims dependent thereon, to delete the term "and related conditions associated with nasal congestion". Accordingly, the Examiner's rejection of claims 27-30 under 35 U.S.C. Section 112, second paragraph, should be withdrawn.

Objection to the Specification under 35 U.S.C. Section 112, first paragraph.

The Examiner has objected to the specification under 35 U.S.C. Section 112, first paragraph, as failing to adequately teach how to make and/or use the invention, and thereby failing to provide an enabling disclosure. The Examiner states that the instant specification fails to provide information that would allow the skilled artisan to practice the instant invention without undue experimentation. The Examiner argues that applicant fails to set forth the criteria that defines those situations where "rhinitis", or related conditions would be "prevented" and fails to provide information allowing the skilled artisan to ascertain those therapeutic regimens employed to effect diseases prevention without undue experimentation. The Examiner notes that only a limited number of individual situations are disclosed and prevention reads on the absolute relief of disease and/or symptomology, a situation rarely seen within the confines of medical practice. The Examiner states that the working examples fail to illustrate even one situation where any one of many envisioned "rhinitis", or related conditions are prevented, thereby failing to provide sufficient working examples. The Examiner notes that these examples are neither exhaustive nor define the therapeutic regimens required and the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. The Examiner concludes that the instant claims read on preventing "rhinitis" or related conditions, necessitating an exhaustive search for the embodiments suitable to practice the claimed invention and applicants fail to provide information sufficient to practice the claimed invention, absent undue experimentation. Applicants' claim, as amended, obviate the Examiner's objection.

As set out above, applicants have amended claim 27 to delete the term "prevention and/or". Moreover, applicants have stated in the specification:

Usually, after respiratory bursting the stimulant and/or the mechanism of stimulation turns off allowing the leucocyte to return to its normal resting state. When the bursting does not turn off, the inflammatory action of the leucocytes continues unchecked causing a number of disease states. These disease states occur as the

compounds produced by the leucocytes attack, injure and kill tissue cells and other leucocytes. It is this failure to turn off the respiratory burst and the resulting injury to surrounding tissue cells, blood cells, other leucocytes and injured cells that produces the disease states treated by the present invention. Undesired inflammatory response occurs when the inflammatory response causes injury to host cells and this injury poses an independent threat to the host. (specification at page 15, lines 1-10)

The inflammatory mediator is administered in a therapeutically effective amount to reduce the undesired inflammatory response. Preferably from 0.0001 to 10 grams per dose. More preferably 0.0001 to 1 gram per dose and most preferably 0.001 to 0.25 grams per dose. It is understood that the method of administration and the condition being treated will greatly affect the dose required to achieve the therapeutic effect. (specification at page 18, lines 1-6)

Typical diseases treatable by the present compositions and method include but are not limited to rhinitis, eosinophilia syndrome, sinusitis and the like. The present invention discloses a pyruvate containing nasal moisturizing saline solution and a method for the prevention and/or treatment of rhinitis, eosiphilia syndrome, sinusitis and related conditions associated with nasal congestion. (specification at page 18, lines 8-12)

In a preferred embodiment, the pyruvate is present in the nasal moisturizing saline solution at a concentration of about 0.5mM to 10mM, the buffer is sodium bicarbonate.

In another preferred embodiment, the pyruvate is present in the nasal solution at a concentration of about 0.5mM to 6mM, the buffer is sodium bicarbonate.

In yet another preferred embodiment, the pyruvate is present in the nasal solution at a concentration of about 1.0mM to 6mM, the buffer is sodium bicarbonate. (specification at page 19, lines 1-11)

Applicants have amended claim 27 to delete the term "prevention and/or". Accordingly, the Examiner's objection to the specification under 35 U.S.C. Section 112, first paragraph, should be withdrawn.

It has been consistently held that the first paragraph of 35 U.S.C. Section 112 required nothing more than objective enablement.... In satisfying the enablement requirement, an application need not teach, and preferably omits, that which is well-known in the art.... How such a teaching is set forth, whether by the use of illustrative examples or by broad descriptive terminology, is of no importance since a specification which teaches how to make and use the invention in terms which correspond in scope to the claims must be taken as complying with the first paragraph of 35 U.S.C. Section 112 unless there is reason to doubt the objective truth of the statements relied upon therein for enabling support... The error we see in Staehelin's approach to the question before us is that Staehelin would require a patent specification to be a blueprint which, if followed, would unfailingly reproduce exactly an applicant's claimed invention. However, the law does not require a specification to be a blueprint in order to satisfy the requirement for enablement under 35 U.S.C. Section 112, first paragraph. *Staehelin v. Secher*, 24 U.S.P.Q.2d 1513, 1516 (B.P.A.I 1992).

In order to be entitled to the benefit thereof, it is not necessary that a patent application exactly describe the limitations of a claimed process, but only so clearly that those skilled in the art would recognize from the disclosure that applicant invented the claimed process, including those limitations. *In re Wertheim et al.*, (C.C.P.A. 1976) 541 F2d 257, 191 U.S.P.Q. 90.

Rejection of Claims 27-30 under 35 U.S.C. Section 112, first and second paragraphs.

The Examiner has rejected claims 27-30 under 35 U.S.C. Section 112, first and second paragraphs. Specifically, the Examiner states that claims 27-30 are rendered indefinite by the phrase "preventing" "rhinitis" and thereby failing to clearly set forth the metes and bounds of the patent protection desired. The Examiner argues that absent exemplification, the skilled artisan could not establish the identity of those therapeutic situations that were envisioned as encompassed by regimens directed to "preventing" "rhinitis". Applicants' claims as amended obviate the Examiner's rejections.

As set out above, applicants have amended claim 27, and the claims dependent thereon, to delete the term "prevention and/or". Accordingly, the Examiner's rejection of claims 27-30 under 35 U.S.C. Section 112, first and second paragraphs, should be withdrawn.

Objection to the Specification under 35 U.S.C. Section 112, first paragraph.

The Examiner has objected to the specification under 35 U.S.C. Section 112, first paragraph, as failing to adequately teach how to make and/or use the invention, and thereby failing to provide an enabling disclosure. The Examiner states that the instant specification fails to provide information that would allow the skilled artisan to practice the instant invention without undue experimentation. The Examiner argues that applicant fails to set forth the criteria that defines, or suggest the required "inflammatory mediator" compounds and fails to provide information allowing the skilled artisan to ascertain these compounds without undue experimentation. The Examiner contends that only a limited number of "inflammatory mediator" compound examples are set forth, thereby failing to provide sufficient working examples and these examples are neither exhaustive, nor define the class of compounds required. The Examiner states that the pharmaceutical art is unpredictable requiring each embodiment to be individually assessed for physiological activity and the instant claims read on all "inflammatory

"mediator" compounds, necessitating an exhaustive search for the embodiments suitable to practice the claimed invention. Applicants' claims as amended obviate the Examiner's objection.

As set out above, applicants have canceled dependent claim 7 and incorporated the subject matter into independent claim 1 to recite that the inflammatory mediator "is selected from the group consisting of pyruvate and a pyruvate precursor". Accordingly, the Examiner's objection to the specification under 35 U.S.C. Section 112, first paragraph.

Rejection of Claims 1-6, 12-18, and 31 under 35 U.S.C. Section 112, first paragraph.

The Examiner has rejected claims 1-6, 12-18, and 31 under 35 U.S.C. Section 112, first paragraph, for the reasons set forth in the objection to the specification. Applicants' claims as amended obviate the Examiner's rejection.

As set out above, applicants have amended claim 1, by incorporating the subject matter of claim 7, to recite that the inflammatory mediator "is selected from the group consisting of pyruvate and a pyruvate precursor." Accordingly, the Examiner's rejection of claims 1-6, 12-18, and 31 under 35 U.S.C. Section 112, first paragraph, should be withdrawn.

Rejection Claims 1-12 and 27-31 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* and *Katz* in view of *Lindstrom et al* and *Lueck*

The Examiner has rejected claims 1-12 and 27-31 under 35 U.S.C. Section 103 as being unpatentable over CA 93:179735 (*Pandse et al.*) and United States patent no. 5,798,388 (*Katz*), in view of United States patent no. 4,696,917 (*Lindstrom et al*) and Erich Lueck (Springer-Verlag, 1980, pages 263-264) (*Lueck*). The Examiner states that *Pandse et al.* and *Katz* teach the claimed compounds as old and well known in combination with various pharmaceutical carriers and excipients and as useful for treating inflammation. The Examiner argues that possessing these teachings, the skilled artisan would have been motivated to employ

these compounds for any anti-inflammatory use and enjoy a reasonable expectation of therapeutic success. The Examiner states that claims 7-12 and 27-31 and the primary references differ as to recitation of salts or related compounds; the concomitant employment of these medicaments and carriers; nasal administration of the medicaments; and disclosure of antimicrobial activity of the active agent. The Examiner contends that it is obvious to combine therapeutic compounds, carriers, and excipients, each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose. The Examiner states that *Lindstrom et al.* teach the excipients herein claimed as useful in formulating anti-inflammatory medicaments; *Katz* teaches the claimed compounds for treating inflammation in body cavities and organs (nasal compositions), and *Lueck* teaches the active agent polyethylene glycol as possessing antimicrobial activity. Applicants' claims as amended obviates the Examiner's rejection.

In summary, applicants submit that the present claims are not obvious over *Pandse et al.* and *Katz* in view of *Lindstrom et al.* and *Lueck*. As set out above, applicants have amended claim 11 to delete "propylene glycol". Accordingly, *Pandse et al.* does not teach or suggest applicants' inflammatory mediator selected from the group consisting of pyruvate and a pyruvate precursor. Moreover, *Katz* teaches the use of pyruvate in lungs and does not teach the use of pyruvate for all cavities. Pyruvate acts differently in nasal cavities than in lungs. Accordingly, the combination of *Pandse et al.* and *Katz* do not provide applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response comprising: contacting the mammalian nasal and sinus cells with an inflammatory mediator.

The present invention provides a method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response. The method comprises contacting the mammalian nasal and sinus cells with an inflammatory mediator. The inflammatory mediator is present in an amount capable of reducing the undesired inflammatory response and is an antioxidant. The inflammatory mediator is selected from the group consisting of pyruvate and a pyruvate precursor.

The present invention also provides a method for the treatment of rhinitis, eosinophilia syndrome, and sinusitis and related conditions associated with nasal congestion. The method comprises administering a nasal solution to the nostrils of a patient in need thereof. The nasal moisturizing saline solution comprises water; sodium chloride, 0.65% by weight; pyruvate, at least 0.1mM; buffer; and optionally a preservative. The nasal moisturizing saline solution is buffered and made isotonic.

The *Pandse et al.* reference discloses the anti-inflammatory activity of propylene glycol. Propylene glycol is said to show anti-inflammatory activity in carrageenin inflammations. When compared with dexamethasone and phenylbutazone, propylene glycol is said to show approximately similar anti-inflammatory potency.

The *Katz* reference discloses a method for treating asthma in mammals caused by mammalian cells involved in the inflammatory response. The method comprises contacting the mammalian cells with an inflammatory mediator. The inflammatory mediator is an antioxidant and is selected from the group consisting of pyruvate and a pyruvate precursor. The inflammatory mediator is present in an amount capable of reducing the undesired inflammatory response and is not administered together with albuterol.

The *Lindstrom et al.* reference discloses a composition for irrigating and flushing body tissue during surgery. The composition comprises Eagle's Minimum Essential Medium with Earle's salts, without L-glutamine and phenol red, and supplemented with non-essential amino acids; chondroitin sulfate; a buffer system based on N'-2-hydroxyethylpiperazine-N'ethane sulfonic acid; 2-mercaptoethanol; and a pyruvate.

The *Lueck* reference discloses 1,2-propylene glycol has a preservative action and is excreted from the body partly unchanged and partly oxidized to lactic acid. The antimicrobial action, like that of sodium chloride and sucrose, is based on a reduction in the water activity.

Applicants submit that the Examiner provides references that show that oxidation and high temperatures are required to convert glycol to pyruvic acid. This conversion does not occur in the human body. As the references show, glycol

remains as glycol in the body. Glycol is used in many products because of its stability. Glycols are antimicrobials because they dissolve membranes and coat microorganisms and do not allow microorganisms to attach to mucus membranes. Unlike glycol, pyruvate is not an antimicrobial. Unlike pyruvate, propylene glycol is not an antioxidant, is not transported into cells, cannot protect cells and DNA, and is irritating to the skin.

Applicants further submit that *Pandse et al.* and *Katz* do not teach the use of pyruvate for all cavities. *Katz* teaches the use of pyruvate in lungs. Pyruvate acts differently in nasal cavities than in lungs. Nasal cavities produce 1000 times more nitric oxide than lungs. This amount of nitric oxide production in the lungs can damage lung tissue. Pyruvate reduces levels of nitric oxide and hydrogen peroxide. Glycols do not reduce levels of nitric oxide and hydrogen peroxide.

Lindstrom et al. merely uses pyruvate for irrigation solutions for ATP. *Lindstrom et al.* does not disclose that pyruvate is an antioxidant that reduces nitric oxide and reduces inflammatory mediators such as proteases and cytokines. *Lindstrom et al.* does not teach the use of pyruvate in the lungs or sinuses. Carrageenin is a polysaccharide of red seaweed and can cause inflammation in man. Propylene glycol inhibits the inflammation caused by carrageenin by coating carrageenin to reduce contact with mucosa. Unlike propylene glycol, pyruvate is not a solvent that reduces carrageenin induced inflammation.

Accordingly, the Examiner's rejection of claims 1-12 and 27-31 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* and *Katz* in view of *Lindstrom et al Lueck* should be withdrawn.

Rejection of Claims 10-12 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* in view of the *Merck Index*.

The Examiner has rejected claims 10-12 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* in view of the *Merck Index* (7756). The Examiner states that *Pandse et al.* teaches the claimed compounds as old and well known in combination with various pharmaceutical carriers and excipients. The Examiner states that claims 10-12 and the primary references differ as to the

recitation of metabolite compounds; and the nasal administration of the medicaments. The Examiner argues that the *Merck Index* (7756) teaches the claimed pyruvate as the degradation product of propylene glycol, motivating the skilled artisan to employ this compound, or its degradation products for the same anti-inflammatory use. The Examiner states that *Pandse et al.* teaches the claimed compounds for treating inflammation generally, and not limited to one specific anti-inflammatory use. The Examiner concludes that the skilled artisan would have been motivated to employ the claimed anti-inflammatory compounds for nasal administration and enjoy a reasonable expectation of therapeutic success, absent information to the contrary. Applicants traverse the Examiner's rejection.

The combination of the primary reference of *Pandse et al.* with the secondary reference of *Merck Index* (7756) does not disclose applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response. Because the primary reference of *Pandse et al.* does not teach or suggest applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells, the secondary reference of *Merck Index* (7756), adds nothing to the primary reference of *Pandse et al.* *Pandse et al.* does not disclose applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells.

Accordingly, the Examiner's rejection of claims 10-12 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* in view of the *Merck Index* (7756) should be withdrawn.

Rejection of Claims 13-18 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* and *Katz* in view of *Lindstrom et al.* and *Lueck* in further view of *Hummel et al.*

The Examiner has rejected claims 13-18 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* and *Katz* in view of *Lindstrom et al.* and *Lueck*, as set forth above, in further view of 130:163132 (*Hummel et al.*) The Examiner states that *Hummel et al.* teaches that oxymetazoline is old and well known in combination with various pharmaceutical carriers and excipients in a

dosage form, and is taught as useful for treating rhinitis. The Examiner states that claims 13-18 and the primary references differ as to the concomitant employment of these medicaments and carriers. The Examiner argues that it is obvious to combine therapeutic compounds, carriers and excipients each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose. Applicants traverse the Examiner's rejections.

The combination of the primary reference of *Pandse et al.* with the secondary reference of *Hummel et al.* does not disclose applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells involved in the inflammatory response. Because the primary reference of *Pandse et al.* does not teach or suggest applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells, the secondary reference of *Hummel et al.*, adds nothing to the primary reference of *Pandse et al.* *Pandse et al.* does not disclose applicants' method for treating a disease state in mammals caused by mammalian nasal and sinus cells.

Accordingly, the Examiner's rejection of claims 13-18 under 35 U.S.C. Section 103 as being unpatentable over *Pandse et al.* and *Katz* in view of *Lindstrom et al.* and *Lueck*, as set forth above, in further view of *Hummel et al.* should be withdrawn.

Obviousness of a composition or process must be predicated on something more than it would be obvious "to try" the particular component recited in the claims or the possibility it will be considered in the future, having been neglected in the past. *Ex parte Argabright et al.* (POBA 1967) 161 U.S.P.Q. 703. There is usually an element of "obvious to try" in any research endeavor, since such research is not undertaken with complete blindness but with some semblance of a chance of success. "Obvious to try" is not a valid test of patentability. *In re Mercier* (CCPA 1975) 515 F2d 1161, 185 U.S.P.Q. 774; *Hybritech Inc. v. Monoclonal Antibodies. Inc.* (CAFC 1986) 802 F2d 1367, 231 U.S.P.Q. 81; *Ex parte Old* (BPAI 1985) 229 U.S.P.Q. 196; *In re Geiger* (CAFC 1987) 815 F2d 686, 2 U.S.P.Q.2d 1276. *In re Dow Chemical Co.* (CAFC 1988) F2d, 5 U.S.P.Q.2d 1529. Patentability determinations based on that as a test are contrary to statute. *In re Antonie* (CCPA 1977) 559 F2d 618, 195 U.S.P.Q. 6; *In re*

Goodwin et al. (CCPA 1978) 576 F2d 375, 198 U.S.P.Q. 1; *In re Tomlinson et al.* (CCPA 1966) 363 F2d 928, 150 U.S.P.Q. 623. A rejection based on the opinion of the Examiner that it would be "obvious to try the chemical used in the claimed process which imparted novelty to the process does not meet the requirement of the statute (35 U.S.C. 103) that the issue of obviousness be based on the subject matter as a whole. *In re Dien* (CCPA 1967) 371 F2d 886, 152 U.S.P.Q. 550; *In re Wiaains* (CCPA 1968) 397 F2d 356, 158 U.S.P.Q. 199; *In re Yates* (CCPA 1981) 663 F2d 1054, 211 U.S.P.Q. 1149. Arguing that mere routine experimentation was involved overlooks the second sentence of 35 USC 103. *In re Saether* (CCPA 1974) 492 F2d 849, 181 U.S.P.Q. 36. The issue is whether the experimentation is within the teachings of the prior art. *In re Waymouth et al.* (CCPA 1974) 499 F2d 1273, 182 U.S.P.Q. 290. The fact that the prior art does not lead one skilled in the art to expect the process used to produce the claimed product would fail does not establish obviousness. *In re Dow Chem. Co.* (CAFC 1988) 5 U.S.P.Q.2d 1529.

The provisions of Section 103 must be followed realistically to develop the factual background against which the Section 103 determination must be made. It is not proper within the framework of Section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary for the full appreciation of what such reference fairly suggest to one of ordinary skill in the art. The references of record fail to teach or suggest applicants' invention as a whole.

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Applicants request the Examiner to telephone the undersigned attorney should the Examiner have any questions or comments which might be most expeditiously handled by a telephone conference. Applicants' attorney authorizes the Examiner to charge Deposit Account 13-4822 if there are any additional charges in connection with this Response.

Respectfully submitted,
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